Abstract: *Sidalcea nelsoniana* is a perennial herb native to wetland prairies of the Willamette Valley, Oregon that is listed as threatened under the federal Endangered Species Act and by the State of Oregon. Because of extreme habitat loss and encroachment by woody species and weedy pest plants in remaining wetland prairies, conservation of *S. nelsoniana* will likely require active management of the habitat. This study tests specific hypotheses about the response of *S. nelsoniana* to fire and mowing. During the summer of 1998, aspects of *S. nelsoniana* growth and flowering intensity were measured within 112 permanent quadrats in an established population at W.L. Finley National Wildlife Refuge near Corvallis, Oregon. Elevation, litter depth and cover of woody and other herbaceous species were also measured within each quadrat. The study site was divided into 15 treatment areas, with five replicates of each of the three treatments: burning, mowing and no manipulation. Treatments were applied during the fall of 1998, and the same measurements of *S. nelsoniana* and the surrounding vegetation were recorded in 1999. Re-emergence, growth and flowering intensity of *S. nelsoniana* did not differ significantly among treatments during the first year after manipulations. However, burning and mowing significantly reduced canopy cover and increased herbaceous cover. Because perennials often respond slowly to changes in habitat, treatment effects may be more evident in future years and long-term monitoring is crucial.

Keywords: *Sidalcea nelsoniana*, fire, mowing, rare plants, habitat restoration, habitat management.